

02-09-00

(Rev. 10-7/99, Pub. 605)

FORM 4-1

43

Practitioner's Docket No. AC2321

PATENT

Preliminary Classification:

Proposed Class:

Subclass:

NOTE: "All applicants are requested to include a preliminary classification on newly filed patent applications. The preliminary classification, preferably class and subclass designations, should be identified in the upper right-hand corner of the letter of transmittal accompanying the application papers, for example 'Proposed Class 2, subclass 129.'" M.P.E.P. § 601, 7th ed.

jc710 U.S. PTO

05567/60

02/07/00

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Box Patent Application  
Assistant Commissioner for Patents  
Washington, D.C. 20231

## NEW APPLICATION TRANSMITTAL

Transmitted herewith for filing is the patent application of

Inventor(s): ALLAN CAMERON

WARNING: 37 C.F.R. § 1.41(e)(1) points out:

"(a) A patent is applied for in the name or names of the actual inventor or inventors.

"(1) The inventorship of a nonprovisional application is that inventorship set forth in the oath or declaration as prescribed by § 1.63, except as provided for in § 1.53(d)(4) and § 1.63(d). If an oath or declaration as prescribed by § 1.63 is not filed during the pendency of a nonprovisional application, the inventorship is that inventorship set forth in the application papers filed pursuant to § 1.53(b), unless a petition under this paragraph accompanied by the fee set forth in § 1.17(i) is filed supplying or changing the name or names of the inventor or inventors."

For (title):

SELF-MOUNTING SAFETY WINDOW INSERT

## CERTIFICATION UNDER 37 C.F.R. § 1.10\*

(Express Mail label number is mandatory.)

(Express Mail certification is optional.)

I hereby certify that this New Application Transmittal and the documents referred to as attached therein are being deposited with the United States Postal Service on this date 2-7-2000, in an envelope as "Express Mail Post Office to Addressee," mailing Label Number EJ76980496 DUS, addressed to the: Assistant Commissioner for Patents, Washington, D.C. 20231.

ALLAN CAMERON

(type or print name of person mailing paper)



Signature of person mailing paper

WARNING: Certificate of mailing (first class) or facsimile transmission procedures of 37 C.F.R. § 1.8 cannot be used to obtain a date of mailing or transmission for this correspondence.

\*WARNING: Each paper or fee filed by "Express Mail" must have the number of the "Express Mail" mailing label placed thereon prior to mailing. 37 C.F.R. § 1.10(b).

"Since the filing of correspondence under § 1.10 without the Express Mail mailing label thereon is an oversight that can be avoided by the exercise of reasonable care, requests for waiver of this requirement will not be granted on petition." Notice of Oct. 24, 1996, 60 Fed. Reg. 56,439, at 56,442.

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02/07/00  
jc490 U.S. PTO

02/07/00 15:34 FAX 213 486 9807

**1. Type of Application**

This new application is for a(n)

(check one applicable item below)

- ☒ Original (nonprovisional)  
☐ Design  
☐ Plant

**WARNING:** Do not use this transmittal for a completion in the U.S. of an International Application under 35 U.S.C. § 371(c)(4), unless the International Application is being filed as a divisional, continuation or continuation-in-part application.

**WARNING:** Do not use this transmittal for the filing of a provisional application.

**NOTE:** If one of the following 3 items apply, then complete and attach **ADDED PAGES FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF A PRIOR U.S. APPLICATION CLAIMED** and a **NOTIFICATION IN PARENT APPLICATION OF THE FILING OF THIS CONTINUATION APPLICATION**.

- ☐ Divisional.  
☐ Continuation.  
☐ Continuation-in-part (C-I-P).

**2. Benefit of Prior U.S. Application(s) (35 U.S.C. §§ 119(e), 120, or 121)**

**NOTE:** A nonprovisional application may claim an invention disclosed in one or more prior filed copending nonprovisional applications or copending international applications designating the United States of America. In order for a nonprovisional application to claim the benefit of a prior filed copending nonprovisional application or copending international application designating the United States of America, each prior application must name as an inventor at least one inventor named in the later filed nonprovisional application and disclose the named inventor's invention claimed in at least one claim of the later filed nonprovisional application in the manner provided by the first paragraph of 35 U.S.C. § 112. Each prior application must also be:

(i) An international application entitled to a filing date in accordance with PCT Article 11 and designating the United States of America; or

(ii) Complete as set forth in § 1.51(b); or

(iii) Entitled to a filing date as set forth in § 1.53(b) or § 1.53(d) and include the basic filing fee set forth in § 1.16; or

(iv) Entitled to a filing date as set forth in § 1.53(b) and have paid therein the processing and retention fee set forth in § 1.21(f) within the time period set forth in § 1.53(f).

37 C.F.R. § 1.78(a)(1).

**NOTE:** If the new application being transmitted is a divisional, continuation or a continuation-in-part of a parent case, or where the parent case is an International Application which designated the U.S., or benefit of a prior provisional application is claimed, then check the following item and complete and attach **ADDED PAGES FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF PRIOR U.S. APPLICATION(S) CLAIMED**.

**WARNING:** If an application claims the benefit of the filing date of an earlier filed application under 35 U.S.C. §§ 120, 121 or 365(c), the 20-year term of that application will be based upon the filing date of the earliest U.S. application that the application makes reference to under 35 U.S.C. §§ 120, 121 or 365(c). (35 U.S.C. § 154(a)(2) does not take into account, for the determination of the patent term, any application on which priority is claimed under 35 U.S.C. §§ 119, 365(a) or 365(b).) For a c-i-p application, applicant should review whether any claim in the patent that will issue is supported by an earlier application and, if not, the applicant should consider canceling the reference to the earlier filed application. The term of a patent is not based on a claim-by-claim approach. See Notice of April 14, 1995, 60 Fed. Reg. 20,195, at 20,205.

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**WARNING:** When the last day of pendency of a provisional application falls on a Saturday, Sunday, or Federal holiday within the District of Columbia, any nonprovisional application claiming benefit of the provisional application must be filed prior to the Saturday, Sunday, or Federal holiday within the District of Columbia. See 37 C.F.R. § 1.78(a)(3).

- ☐ The new application being transmitted claims the benefit of prior U.S. application(s). Enclosed are ADDED PAGES FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF PRIOR U.S. APPLICATION(S) CLAIMED.

### 3. Papers Enclosed

A. Required for filing date under 37 C.F.R. § 1.53(b) (Regular) or 37 C.F.R. § 1.153 (Design) Application

8 Pages of specification

3 Pages of claims

7 Sheets of drawing

**WARNING:** DO NOT submit original drawings. A high quality copy of the drawings should be supplied when filing a patent application. The drawings that are submitted to the Office must be on smooth, white, smooth, and non-shiny paper and meet the standards according to § 1.84. If corrections to the drawings are necessary, they should be made to the original drawing and a high-quality copy of the corrected original drawing then submitted to the Office. Only one copy is required or desired. For comments on proposed then-new 37 C.F.R. § 1.84, see Notice of March 9, 1988 (1990 O.G. 57-62).

**NOTE:** "Identifying Indicia, if provided, should include the application number or the title of the invention, inventor's name, docket number (if any), and the name and telephone number of a person to call if the Office is unable to match the drawings to the proper application. This information should be placed on the back of each sheet of drawing a minimum distance of 1.5 cm. (5/8 inch) down from the top of the page . . ." 37 C.F.R. § 1.84(c).

(complete the following, if applicable)

- ☐ The enclosed drawing(s) are photograph(s), and there is also attached a "PETITION TO ACCEPT PHOTOGRAPH(S) AS DRAWING(S)." 37 C.F.R. § 1.84(b).

☐ formal

☐ informal

### B. Other Papers Enclosed

2 Pages of declaration and power of attorney

1 Pages of abstract

2 Other *SMALL ENTITY STATUS*

### 4. Additional papers enclosed

☐ Amendment to claims

- ☐ Cancel in this applications claims \_\_\_\_\_ before calculating the filing fee. (At least one original independent claim must be retained for filing purposes.)

☐ Add the claims shown on the attached amendment. (Claims added have been numbered consecutively following the highest numbered original claims.)

☐ Preliminary Amendment

☐ Information Disclosure Statement (37 C.F.R. § 1.98)

☐ Form PTO-1449 (PTO/SB/08A and 08B)

☐ Citations

- ☐ Declaration of Biological Deposit
- ☐ Submission of "Sequence Listing," computer readable copy and/or amendment pertaining thereto for biotechnology invention containing nucleotide and/or amino acid sequence.
- ☐ Authorization of Attorney(s) to Accept and Follow Instructions from Representative
- ☐ Special Comments
- ☐ Other

##### 5. Declaration or oath (Including power of attorney)

**NOTE:** A newly executed declaration is not required in a continuation or divisional application provided that the prior nonprovisional application contained a declaration as required, the application being filed is by all or fewer than all the inventors named in the prior application, there is no new matter in the application being filed, and a copy of the executed declaration filed in the prior application (showing the signature or an indication thereon that it was signed) is submitted. The copy must be accompanied by a statement requesting deletion of the names of person(s) who are not inventors of the application being filed. If the declaration in the prior application was filed under § 1.47, then a copy of that declaration must be filed accompanied by a copy of the decision granting § 1.47 status or, if a nonsigning person under § 1.47 has subsequently joined in a prior application, then a copy of the subsequently executed declaration must be filed. See 37 C.F.R. §§ 1.63(d)(1)-(3).

**NOTE:** A declaration filed to complete an application must be executed. Identify the specification to which it is directed, identify each inventor by full name including family name and at least one given name, without abbreviation together with any other given name or initial, and the residence, post office address and country or citizenship of each inventor, and state whether the inventor is a sole or joint inventor. 37 C.F.R. § 1.63(a)(1)-(4).

**NOTE:** "The inventorship of a nonprovisional application is that inventorship set forth in the oath or declaration as prescribed by § 1.62, except as provided for in § 1.53(d)(4) and § 1.63(d). If an oath or declaration as prescribed by § 1.63 is not filed during the pendency of a nonprovisional application, the inventorship is that inventorship set forth in the application papers filed pursuant to § 1.53(b), unless a petition under this paragraph accompanied by the fee set forth in § 1.17(f) is filed supplying or changing the name or names of the inventor or inventors." 37 C.F.R. § 1.41(a)(1).

☒ Enclosed

Executed by

(check all applicable boxes)

☒ inventor(s).

☐ legal representative of inventor(s).  
37 C.F.R. §§ 1.42 or 1.43.

☐ joint inventor or person showing a proprietary interest on behalf of inventor who refused to sign or cannot be reached.

☐ This is the petition required by 37 C.F.R. § 1.47 and the statement required by 37 C.F.R. § 1.47 is also attached. See item 13 below for fee.

☐ Not Enclosed.

**NOTE:** Where the filing is a completion in the U.S. of an International Application or where the completion of the U.S. application contains subject matter in addition to the International Application, the application may be treated as a continuation or continuation-in-part, as the case may be, utilizing ADDED PAGE FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF PRIOR U.S. APPLICATION CLAIMED.

☐ Application is made by a person authorized under 37 C.F.R. § 1.41(c) on behalf of all the above named inventor(s).

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(The declaration or oath, along with the surcharge required by 37 C.F.R. § 1.16(e) can be filed subsequently).

- ☐ Showing that the filing is authorized.  
(not required unless called into question, 37 C.F.R. § 1.41(d))

## 6. Inventorship Statement

**WARNING:** If the named inventors are each not the inventors of all the claims an explanation, including the ownership of the various claims at the time the last claimed invention was made, should be submitted.

The inventorship for all the claims in this application are:

- ☒ The same.

or

- ☐ Not the same. An explanation, including the ownership of the various claims at the time the last claimed invention was made,  
☐ is submitted.  
☐ will be submitted.

## 7. Language

**NOTE:** An application including a signed oath or declaration may be filed in a language other than English. An English translation of the non-English language application and the processing fee of \$130.00 required by 37 C.F.R. § 1.17(k) is required to be filed with the application, or within such time as may be set by the Office, 37 C.F.R. § 1.52(d).

- ☒ English  
☐ Non-English  
☐ The attached translation includes a statement that the translation is accurate. 37 C.F.R. § 1.52(d).

## 8. Assignment

- ☐ An assignment of the invention to \_\_\_\_\_  
\_\_\_\_\_  
☐ is attached. A separate ☐ "COVER SHEET FOR ASSIGNMENT (DOCUMENT) ACCOMPANYING NEW PATENT APPLICATION" or ☐ FORM PTO 1595 is also attached.  
☐ will follow.

**NOTE:** "If an assignment is submitted with a new application, send two separate letters—one for the application and one for the assignment." Notice of May 4, 1990 (1114 O.G. 77-78).

**WARNING:** A newly executed "CERTIFICATE UNDER 37 C.F.R. § 3.73(b)" must be filed when a continuation-in-part application is filed by an assignee. Notice of April 30, 1993, 1150 O.G. 62-64.

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**9. Certified Copy**

Certified copy(ies) of application(s)

Country	Appln. No.	Filed
Country	Appln. No.	Filed
Country	Appln. No.	Filed

from which priority is claimed

- ☐ Is (are) attached.  
☐ will follow.

**NOTE:** The foreign application forming the basis for the claim for priority must be referred to in the oath or declaration. 37 C.F.R. § 1.55(a) and 1.63.

**NOTE:** This item is for any foreign priority for which the application being filed directly relates. If any parent U.S. application or International Application from which this application claims benefit under 35 U.S.C. § 120 is itself entitled to priority from a prior foreign application, then complete Item 18 on the ADDED PAGES FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF PRIOR U.S. APPLICATION(S) CLAIMED.

**10. Fee Calculation (37 C.F.R. § 1.16)**A. ☒ Regular application

CLAIMS AS FILED			
Number filed	Number Extra	Rate	Basic Fee 37 C.F.R. § 1.16(a) <del>\$760.00</del> 690.00
Total			
Claims (37 C.F.R. § 1.16(c))	15 - 20 = 0	×	\$ 18.00
Independent			
Claims (37 C.F.R. § 1.16(b))	3 - 3 = 0	×	\$ 78.00
Multiple dependent claim(s), if any (37 C.F.R. § 1.16(d))			
		+	\$260.00

- ☐ Amendment cancelling extra claims is enclosed.  
☐ Amendment deleting multiple-dependencies is enclosed.  
☐ Fee for extra claims is not being paid at this time.

**NOTE:** If the fees for extra claims are not paid on filing they must be paid or the claims cancelled by amendment, prior to the expiration of the time period set for response by the Patent and Trademark Office in any notice of fee deficiency. 37 C.F.R. § 1.16(d).

Filing Fee Calculation

\$ 690.00

B. ☐ Design application  
(\$310.00—37 C.F.R. § 1.16(f))

Filing Fee Calculation

\$

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(Rev. 8-79 Pub. 603)

FORM 4-1

4-9

- C. ☐ Plant application  
(\$480.00—37 C.F.R. § 1.16(g))

Filing fee calculation

\$ \_\_\_\_\_

## 11. Small Entity Statement(s)

- ☒ Statement(s) that this is a filing by a small entity under 37 C.F.R. § 1.9 and 1.27 is (are) attached.

**WARNING:** "Status as a small entity must be specifically established in each application or patent in which the status is available and desired. Status as a small entity in one application or patent does not affect any other application or patent, including applications or patents which are directly or indirectly dependent upon the application or patent in which the status has been established. The refiling of an application under § 1.53 as a continuation, division, or continuation-in-part (including a continued prosecution application under § 1.53(d)), or the filing of a reissue application requires a new determination as to continued entitlement to small entity status for the continuing or reissue application. A nonprovisional application claiming benefit under 35 U.S.C. § 119(e), 120, 121, or 365(c) of a prior application, or a reissue application may rely on a statement filed in the prior application or in the patent if the nonprovisional application or the reissue application includes a reference to the statement in the prior application or in the patent or includes a copy of the statement in the prior application or in the patent and status as a small entity is still proper and desired. The payment of the small entity basic statutory filing fee will be treated as such a reference for purposes of this section." 37 C.F.R. § 1.28(a)(2).

**WARNING:** "Small entity status must not be established when the person or persons signing the . . . statement can unequivocally make the required self-certification." M.P.E.P., § 509.03, 6th ed., rev. 2, July 1996 (emphasis added).

(complete the following, if applicable)

- ☐ Status as a small entity was claimed in prior application

\_\_\_\_\_/\_\_\_\_\_, filed on \_\_\_\_\_, from which benefit is being claimed for this application under:

- 35 U.S.C. § ☐ 119(e),  
☐ 120,  
☐ 121,  
☐ 365(c),

and which status as a small entity is still proper and desired.

- ☐ A copy of the statement in the prior application is included.

Filing Fee Calculation (50% of A, B or C above)

\$ 345.00

**NOTE:** Any excess of the full fee paid will be refunded if small entity status is established and a refund request are filed within 2 months of the date of timely payment of a full fee. The two-month period is not extendable under § 1.136. 37 C.F.R. § 1.28(a).

## 12. Request for International-Type Search (37 C.F.R. § 1.104(d))

(complete, if applicable)

- ☐ Please prepare an international-type search report for this application at the time when national examination on the merits takes place.

**13. Fee Payment Being Made at This Time**☐ Not Enclosed☐ No filing fee is to be paid at this time.*(This and the surcharge required by 37 C.F.R. § 1.16(e) can be paid subsequently.)*☒ Enclosed☐ Filing fee\$ 345<sup>00</sup>☐ Recording assignment

(\$40.00; 37 C.F.R. § 1.21(h))

(See attached "COVER SHEET FOR  
ASSIGNMENT ACCOMPANYING NEW  
APPLICATION".)

\$ \_\_\_\_\_

☐ Petition fee for filing by other than all the  
inventors or person on behalf of the inventor  
where inventor refused to sign or cannot be  
reached

(\$130.00; 37 C.F.R. §§ 1.47 and 1.17(i))

\$ \_\_\_\_\_

☐ For processing an application with a  
specification in

a non-English language

(\$130.00; 37 C.F.R. §§ 1.52(d) and 1.17(k))

\$ \_\_\_\_\_

☐ Processing and retention fee

(\$130.00; 37 C.F.R. §§ 1.53(d) and 1.21(l))

\$ \_\_\_\_\_

☐ Fee for international-type search report

(\$40.00; 37 C.F.R. § 1.21(e))

\$ \_\_\_\_\_

NOTE: 37 C.F.R. § 1.21(l) establishes a fee for processing and retaining any application that is abandoned for failing to complete the application pursuant to 37 C.F.R. § 1.53(f) and this, as well as the charges to 37 C.F.R. §§ 1.53 and 1.78(a)(1), indicate that in order to obtain the benefit of a prior U.S. application, either the basic filing fee must be paid, or the processing and retention fee of § 1.21(l) must be paid, within 1 year from notification under § 53(f).

Total fees enclosed

\$ 345<sup>00</sup>**14. Method of Payment of Fees**☒ Check in the amount of \$ 345<sup>00</sup>☐ Charge Account No. \_\_\_\_\_ in the amount of  
\$ \_\_\_\_\_

A duplicate of this transmittal is attached.

NOTE: Fees should be itemized in such a manner that it is clear for which purpose the fees are paid. 37 C.F.R. § 1.22(b).

(New Application Transmittal [4-1]—page 8 of 11)

**15. Authorization to Charge Additional Fees**

**WARNING:** If no fees are to be paid on filing, the following items should not be completed.

**WARNING:** Accurately count claims, especially multiple dependent claims, to avoid unexpected high charges, if extra claim charges are authorized.

- ☐ The Commissioner is hereby authorized to charge the following additional fees by this paper and during the entire pendency of this application to Account No. \_\_\_\_\_:

☐ 37 C.F.R. § 1.16(a), (f) or (g) (filing fees)

☐ 37 C.F.R. § 1.16(b), (c) and (d) (presentation of extra claims)

**NOTE:** Because additional fees for excess or multiple dependent claims not paid on filing or on later presentation must only be paid or these claims cancelled by amendment prior to the expiration of the time period set for response by the PTO in any notice of fee deficiency (37 C.F.R. § 1.16(d)), it might be best not to authorize the PTO to charge additional claim fees, except possibly when dealing with amendments after final action.

☐ 37 C.F.R. § 1.16(e) (surcharge for filing the basic filing fee and/or declaration on a date later than the filing date of the application)

☐ 37 C.F.R. § 1.17(a)(1)-(5) (extension fees pursuant to § 1.136(a)).

☐ 37 C.F.R. § 1.17 (application processing fees)

**NOTE:** ". . . A written request may be submitted in an application that is an authorization to treat any concurrent or future reply, requiring a petition for an extension of time under this paragraph for its timely submission, as incorporating a petition for extension of time for the appropriate length of time. An authorization to charge all required fees, fees under § 1.17, or all required extension of time fees will be treated as a constructive petition for an extension of time in any concurrent or future reply requiring a petition for an extension of time under this paragraph for its timely submission. Submission of the fee set forth in § 1.17(a) will also be treated as a constructive petition for an extension of time in any concurrent reply requiring a petition for an extension of time under this paragraph for its timely submission." 37 C.F.R. § 1.136(a)(3).

☐ 37 C.F.R. § 1.18 (issue fee at or before mailing of Notice of Allowance, pursuant to 37 C.F.R. § 1.311(b))

**NOTE:** Where an authorization to charge the issue fee to a deposit account has been filed before the mailing of a Notice of Allowance, the issue fee will be automatically charged to the deposit account at the time of mailing the notice of allowance. 37 C.F.R. § 1.311(b).

**NOTE:** 37 C.F.R. § 1.28(b) requires "Notification of any change in status resulting in loss of entitlement to small entity status must be filed in the application . . . prior to paying, or at the time of paying, . . . the issue fee. . . ." From the wording of 37 C.F.R. § 1.28(b), (a) notification of change of status must be made even if the fee is paid as "other than a small entity" and (b) no notification is required if the change is to another small entity.

(New Application Transmittal [4-1]—page 9 of 11)

**16. Instructions as to Overpayment**

NOTE: "... Amounts of twenty-five dollars or less will not be returned unless specifically requested within a reasonable time, nor will the payer be notified of such amounts; amounts over twenty-five dollars may be returned by check or, if requested, by credit to a deposit account." 37 C.F.R. § 1.26(a).

- ☐ Credit Account No. \_\_\_\_\_
- ☐ Refund

Reg. No.

Tel. No. (617) 441-2147

Customer No.

  
\_\_\_\_\_  
SIGNATURE OF PRACTITIONERALLAN CAMERON  
(type or print name of attorney)94 SCIARAPPA ST  
\_\_\_\_\_  
P.O. AddressCAMBRIDGE, MA. 02141  
\_\_\_\_\_

(New Application Transmittal [4-1]—page 10 of 11)

(ReL74-1297 Pub.603)

FORM 7-1

7-7

Practitioner's Docket No. AC 2321

PATENT

☒ Applicant ALLAN CAMERON
☐ Patentee \_\_\_\_\_  
☐ Application No. \_\_\_\_\_
 ☐ Patent No. \_\_\_\_\_  
☐ Filed on \_\_\_\_\_
 ☐ Issued on \_\_\_\_\_  
 Title: SELF-MOUNTING SAFETY WINDOW INSERT

**STATEMENT CLAIMING SMALL ENTITY STATUS  
(37 CFR 1.9(f) and 1.27(b))—INDEPENDENT INVENTOR**

As a below named inventor, I hereby state that I qualify as an independent inventor, as defined in 37 CFR 1.9(c), for purposes of paying reduced fees to the United States Patent and Trademark Office under Sections 41(a) and (b) of Title 35, United States Code, to the Patent and Trademark Office with regard to the invention described in

- ☒ the specification filed herewith, with title as listed above.  
☐ the application identified above.  
☐ the patent identified above.

I have not assigned, granted, conveyed or licensed, and am under no obligation under contract or law to assign, grant, convey or license, any rights in the invention to any person who would not qualify as an independent inventor under 37 CFR 1.9(c), if that person had made the invention, or to any concern that would not qualify as a small business concern under 37 CFR 1.9(d), or a nonprofit organization under 37 CFR 1.9(e).

Each person, concern or organization to which I have assigned, granted, conveyed, or licensed or am under an obligation under contract or law to assign, grant, convey, or license any rights in the invention is listed below:

- ☒ No such person, concern, or organization exists.  
☐ Each such person, concern or organization is listed below. \*

\*NOTE: Separate statements are required from each named person, concern or organization having rights to the invention as to their status as small entities. (37 CFR 1.27)

FULL NAME \_\_\_\_\_  
ADDRESS \_\_\_\_\_

☐ INDIVIDUAL
 ☐ SMALL BUSINESS CONCERN
 ☐ NONPROFIT ORGANIZATION

FULL NAME \_\_\_\_\_  
ADDRESS \_\_\_\_\_

☐ INDIVIDUAL
 ☐ SMALL BUSINESS CONCERN
 ☐ NONPROFIT ORGANIZATION

FULL NAME \_\_\_\_\_  
ADDRESS \_\_\_\_\_

☐ INDIVIDUAL
 ☐ SMALL BUSINESS CONCERN
 ☐ NONPROFIT ORGANIZATION



I acknowledge the duty to file, in this application or patent, notification of any change in status resulting in loss of entitlement to small entity status prior to paying, or at the time of paying, the earliest of the issue fee or any maintenance fee due after the date on which status as a small entity is no longer appropriate. (37 CFR 1.28(b))

(check the following item, if desired)

NOTE: The following verification statement need not be made in accordance with the rules published on Oct. 10, 1997, 62 Fed. Reg. 52131, effective Dec. 1, 1997.

NOTE: "The presentation to the Office (whether by signing, filing, submitting, or later advocating) of any paper by a party, whether a practitioner or non-practitioner, constitutes a certification under § 10.18(b) of this chapter. Violations of § 10.18(b)(2) of this chapter by a party, whether a practitioner or non-practitioner, may result in the imposition of sanctions under § 10.18(c) of this chapter. Any practitioner violating § 10.18(b) may also be subject to disciplinary action. See §§ 10.18(d) and 10.23(c)(15)." 37 C.F.R. § 1.4(d)(2).

☒ I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further, that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application, any patent issuing thereon, or any patent to which this verified statement is directed.

ALLAN CAMERON

Name of inventor

Signature of Inventor

Date 2-7-2000

Name of inventor

Signature of Inventor

Date

Name of inventor

Signature of Inventor

Date

(Small Entity—Independent Inventor [7-1]—page 2 of 2)

## **SAFETY SHEILD WINDOW INSERT**

### **BACKGROUND OF THE INVENTION**

The present invention is directed to the field of automotive safety equipment. More particularly, the present invention is directed to a defeasible shield window insert that may be inserted and retained within an opening for an automotive window.

Automobile manufacturers are increasingly incorporating safety features into the design of automobiles, however, with respect to the windows on the automobile, the industry standard remains to simply use a glass window retracting into the door frame. One safety feature that has been incorporated has been the use of a locking device activated by the driver which can be used to prevent passenger windows from being opened. This device is primarily intended for limiting the ability of small children to open a passenger door window.

With respect to a first aspect of the present invention, there are few, if any, devices available to restrain a child or family pet, such as a dog or cat, from exiting through an open window, other than a cage or container. For the safety and comfort of the child or pet, it is clearly beneficial to allow a constant flow of fresh air into the vehicle. Currently, the only choice for parents, or pet owners, who wish to bring safety and comfort to their children and or pets; not confining them physically, or have concern about the amount of air flow, is to limit how far down the window is retracted; thus preventing the child or pet from exiting the window.

With respect to a second aspect of the invention, there has been increasing concern about, and awareness of, the vulnerability of a vehicular occupant to bodily injury or attack as a result of the relative ease of access to the occupant of a vehicle via the glass window of the door. Glass windows may easily be broken and provide little, if any, resistance to assault with a gun.

Currently, the only alternative for increasing the safety of a vehicle occupant with respect to the glass window is to have a custom modification of the vehicle done to install a 'so called

“bullet-proof” window. Such custom modifications are both expensive and relatively uncommon, requiring extensive modifications to the door assembly. Accordingly, the installation of bullet proof windows in vehicles is not commonplace.

A first effort to address the foregoing issues was detailed in applicant’s U. S. Patent No. 5,470,542 issued November 5, 1996, herein incorporated by reference. All of the claims of the No. 5,470,542 patent were based on a window insert that occupied the area normally occupied by the original window. The window insert fitted into the upper channel of the window frame and was retained in its place by the original window fitting into a groove running along the bottom of the insert.

The No. 5,470,542 patent’s window insert retention system, and because the window insert took the place of the original window, greatly limited the use of the invention. The window could not be rolled up when the insert was in place, and the driver was compelled to stop and remove the insert during inclement weather, or to reduce the flow of air through the insert. The bullet proof window insert needs extensive and complicated weather proofing to be used in any inclement weather. Accordingly, it would be beneficial to have an alternative window insert that allows the car’s windows to be rolled up and down while the insert remains in place.

## SUMMARY OF THE INVENTION

The invention is directed to an insert formed from a clear or translucent material, adapted to be inset into, and retained by the window opening within conventional automobiles. With the first aspect of the invention the window insert was intended for use by parents and pet owners, and included a plurality of openings allowing venting of air for the benefit of children and pets, yet having the openings proportioned to prevent the child or pet from exiting the vehicle via the window. The material forming the window insert was preferably a plastic, such as a polycarbonate, or acrylic material.

In the second aspect of the invention the window insert is formed from a high impact resistant transparent material. The window insert is easily installed into the window frame and retained by the window itself. The high impact material forming the window insert is preferably a "bullet proof" material, such as a glass composite or glass-plastic composite.

For either of the two alternative aspects of the invention the window insert includes a mounting bracket which slips between and resides between the window and its lower inside weather-stripping. The window insert has an upper protruding edge, either integral, or separately attached, that is inserted into and shares with the window, the upper channel of the window frame. The window insert attaches to the mounting bracket with fasteners. The window insert sits on the inside of the window. At this point the window insert is fully installed and the window can be raised or lowered. The automobile can be driven with the insert in place, whether the window is rolled up or down. The mounting bracket can have different size offsets to allow for different thickness of the bulletproof window, allowing various levels of protection. The offset also allows for airflow between the window insert and the window, and prevents fogging. No attachments or modification of any kind have been made to the door, car windows, or window frames.

## BRIEF DESCRIPTION OF THE DRAWINGS

**FIG. 1** is a perspective view of the window insert according to the first aspect of the present invention;

**FIG. 2** is a perspective view of another embodiment of the window insert according to the first aspect of the present invention;

**FIG. 3** is a perspective of an alternate embodiment of the window insert;

**FIG. 4** is an alternative design for the orifices of the window insert;

**FIG. 5** is a perspective view of the window insert according to the second aspect of the present invention;

**FIG. 6** is a perspective view of an alternative embodiment of the window insert according to the second aspect of the present invention;

**FIG. 7** is a section view illustrating the installation of the window insert;

**FIG. 8** is a perspective view of an installed window insert from the outside of the automobile.

## DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

**FIG. 1** depicts a window insert **20** according to a first aspect of the invention. The mounting bracket **21** has a bottom blade **22** sized to be insertable between a standard window **23** of an automobile and the lower inside weatherstripping **24** of the window **23**. The mounting bracket **21** has a plane **25** upon which the window insert **20** rests. The mounting bracket **21** also has two fastening devices **26** which retain the window insert **20** having two fastening device receivers **27**.

The window insert **20** has an upper protruding edge **28** sized to be insertable, along with the window **20**, into the upper receiving channel **29** of the window frame of the automobile door. The insert has a notched bottom **30** to rest upon the mounting bracket plane **25** and two fastening device receivers **27** to retain the window insert **20** in the window frame of the automobile door.

Accordingly, it may be appreciated that to install the window insert **20** of the present invention, the window **23** is retracted, the bottom blade **22** of the mounting bracket **21** is inserted between the window **23** and the lower inside weatherstripping **24**. The upper protruding edge **28** of the window insert **20** is inserted into the upper receiving channel **29** of the window frame, and the window insert's notched bottom **30** is rested on the mounting bracket plane **25**. The window insert **20** is then retained in place by engaging the mounting bracket fastening device **26** with the window insert fastening device receiver **27**. At this point, the window **23** may be raised or lowered as desired. It also may be appreciated that at no place has the window, window frame, or automobile door been modified or attached to.

Similarly, **FIG 2** depicts another embodiment of the window insert **20** according to the first aspect of the invention. The window insert **20** has a bottom blade **31** which is sized to be insertable between a standard window **23** of an automobile and the lower inside weatherstripping **24** of the window **23** . The top of the window insert **20** has a receiving edge **32** and fastening devices **33** .

The top mounting bracket **34** has a protruding edge **35** sized to be insertable along with the window **23** into the upper receiving channel **29** of the window frame. The top mounting bracket **34** also has fastening device receivers **36** .

Accordingly, it may be appreciated that to install this embodiment of the window insert **20** of the present invention, the window **23** is retracted. The bottom blade **31** of the window insert **20** is inserted between the window **23** and the lower inside weatherstripping **24** . The top mounting bracket **34** is inserted into the upper receiving channel **29** of the window frame and is rested on the receiving edge **32** of the window insert **20** . The window insert **20** is retained in the window frame by engaging the window insert fastening device **33** and the top mounting bracket fastening device receivers **36** . At this point the window **23** may be raised or lowered as desired and no modification have been made to the car window, window frame, or automobile.

In the first aspect of the present invention, wherein the window insert is used primarily to retain children or pets, it is preferred to include at least one and potentially a plurality of holes or orifices **37** , within the window insert **20** so that airflow can be facilitated. In the most basic embodiment of the invention, the orifices **37** may be simply circular openings cut perpendicular to the plane faces of the window insert, as shown in **FIG 1**.

**FIG 3** is a perspective view of another alternative embodiment for a window insert **38** , and **FIG 4** shows an enlarged perspective view identified by circle **4 — 4** in **FIG 3** . In the design according to **FIGS 3** and **4** , the window insert **38** is formed to define a stepped pocket **39** to accept the top mounting bracket, and a blade **40** at the lower edge to be insertable between the window and the lower inside weatherstripping. In addition the window insert **38** may include orifices **41** having a circumferential ridge **42** , which defines and further strengthens the window

insert 38 . The design of **FIGS 3** and **4** is particularly well suited to manufacture using a vacuum molding technique.

Moreover, for a second aspect of the invention, wherein the window insert is to be used primarily as a high impact resistant bullet proof shield, the window insert would be devoid of orifices as they are illustrated in **FIG 5** . For these applications, the window insert may be manufactured of laminated layers 43 from plastics such as polycarbonate or acrylic or plastic laminates, or glass, or glass-plastic composites.

**FIG 5** illustrates the mounting bracket variation for the bullet proof window insert application. The mounting bracket 44 has an offset mounting plane 45 to accept varying thicknesses of the bullet proof window inserts 46, which provide different levels of protection. The offset mounting plane 45 also enhances air flow around the window insert 46 ,thereby preventing fogging in certain inclement weather conditions.

Ergonomically and aesthetically, it is desirable to have a curved window insert 46 which accomodates the natural contour of the curved glass window of most standard vehicles as **FIG 5** illustrates. However, it maybe less expensive to fabricate window inserts from a flat sheet of glass composite or glass-plastic composite.

**FIG 5** also illustrates one method of forming or manufacturing the window inserts of the present invention. As it may be appreciated, window shapes and sizes vary so greatly from automobile to automobile that the window inserts will be manufactured or formed to provide a custom fit in most applications.

**FIG 6** illustrates another alternative window insert embodiment where as the protruding edge 48 of the window insert 47 is fabricated from a separate material, such as a plastic or a metal, such as aluminum, or steel, is attached to the window insert in some manner, such as a fastener or adhesive. This may provide added strength to the window insert, provide solutions for an unusual application, or aid in manufacturing.

**FIG 7** illustrates the installation process of one embodiment of the window insert. The mounting bracket blade **49** is inserted between the window **50** and the lower inside weatherstripping **51** of the window **50** . The upper protruding edge **52** of the window insert **54** is inserted into the upper window channel **53** . The window insert **54** is rested on the mounting bracket plane **55** and then retained in place by the fastening system **56** . At this point, the window **50** may be raised and occupy the upper window channel **53** with the upper protruding edge **52** of the window insert **54** .

**FIG 8** illustrates the window insert in place as viewed from the outside of the automobile door.

It should be evident from the foregoing description that the present invention provides many advantages over the prior art, for parents, pet owners, and vehicle occupants who wish to increase the security of a vehicle. Although preferred embodiments are specifically illustrated herein, it will be appreciated to those skilled in the art that many modifications and variations of the present invention are possible. It is therefore preferred that the present invention be limited only by the proper literal and equivalent scope of the appended claims.

What is claimed is:

1. A safety device for an automobile vehicle having door windows defined by a retractable glass panel which is guided into a receiving frame, the safety apparatus comprising:
  - a window insert formed from a sheet of optically transmissive material, said window insert having an upper edge defined to be inserted, along with the retractable glass panel window, into the upper receiving channel of the window frame, and
  - a mounting bracket with a lower edge defined to be inserted between the retractable glass panel window and the lower inside weatherstripping of said retractable glass panel window, said mounting bracket having a flat surface to receive the window insert, and said mounting bracket having one or more fasteners to retain the window insert.

2. A safety device of claim 1 wherein said window insert is formed from a material selected from the group consisting of optically transmissive polycarbonates, acrylics, and plastics.
3. A safety device of claim 1 wherein said window insert is formed from a bullet proof material.
4. A safety device of claim 3 wherein said bullet proof material is selected from the group consisting of glass composite and glass/plastic composite.
5. A safety device of claim 1 wherein said window insert has the bottom edge notched to assist during installation and accepts the mounting bracket.
6. A safety device of claim 1 wherein said window insert is formed from a material selected from the group consisting of opaque polycarbonates, acrylics, and plastics.
7. A safety device for an automobile vehicle having door windows defined by a retractable glass panel which is guided into a receiving frame, the safety apparatus comprising:

A window insert formed from a sheet of optically transmissive material, said window insert having a lower edge defined to be inserted between said retractable glass panel window and the lower inside weatherstripping of said retractable glass panel window, said window insert having at least one orifice allowing airflow through said window insert, said window insert having one or more fasteners' and

A mounting bracket with an upper edge defined to be inserted, along with said retractable glass panel window, into the upper receiving channel of the window, said mounting bracket having one or more fastening receivers.
8. A safety device of claim 7 wherein said window insert is formed from a material selected from a group consisting of optically transmissive polycarbonates, acrylics, and plastics.
9. A safety device of claim 7 where said window insert is formed from bullet proof material.

10. A safety device of claim 9 wherein said bullet proof material is selected from the group consisting of glass composite and glass plastic composite.
11. A safety device for an automobile vehicle having door windows defined by a retractable glass panel which is guided into a receiving frame, the safety apparatus comprising:

A window insert formed from a sheet of optically transmissive material, said window insert having an upper edge defined to be inserted, along with the retractable glass panel window, into the upper receiving channel of the window frame, said window insert having a solid surface, said window insert having one or more fastening receivers; and  
a mounting bracket with the lower edge defined to be inserted between the retractable glass panel window and the lower inside weather stripping of the retractable glass panel window, said mounting bracket having a flat surface to receive the window insert, and said mounting bracket having one or more fasteners to retain the window insert.

12. A safety device of claim 11 wherein said window insert is formed from a material selected from the group consisting of optically transmissive polycarbonates, acrylics, and plastics.
13. A safety device of claim 11 wherein said window insert is formed from a bullet proof material.
14. A safety device of claim 13 wherein said bullet proof material is selected from the group consisting of glass composite and glass/plastic composite.
15. A safety device of claim 11 wherein said window insert has the bottom edge notched to assist during installation and accepts the mounting bracket.

**ABSTRACT**

A safety device for an automobile. The safety device being a window insert designed to fit within the standard frame of a window and be retrained within the frame by the upper edge of the window insert, along with the window, fitting into the upper channel of the window frame and the bottom of the window insert fitting into and being retained by a bracket with the lower edge fitting between the window and the lower inside weather stripping of the window. The window insert can be installed in thirty seconds, requires no modification to the window, window frame, or door, and when in place the window may be raised or lowered at any time. The window insert may include orifices to allow air inflow and/or outflow so as to provide a continuous flow of fresh air into the vehicle. The safety device may be used to retain a child or a pet, and can be formed from a plastic, plexiglass, or polycarbonate material. Alternatively, the window insert may be formed from a high impact or bullet proof material.

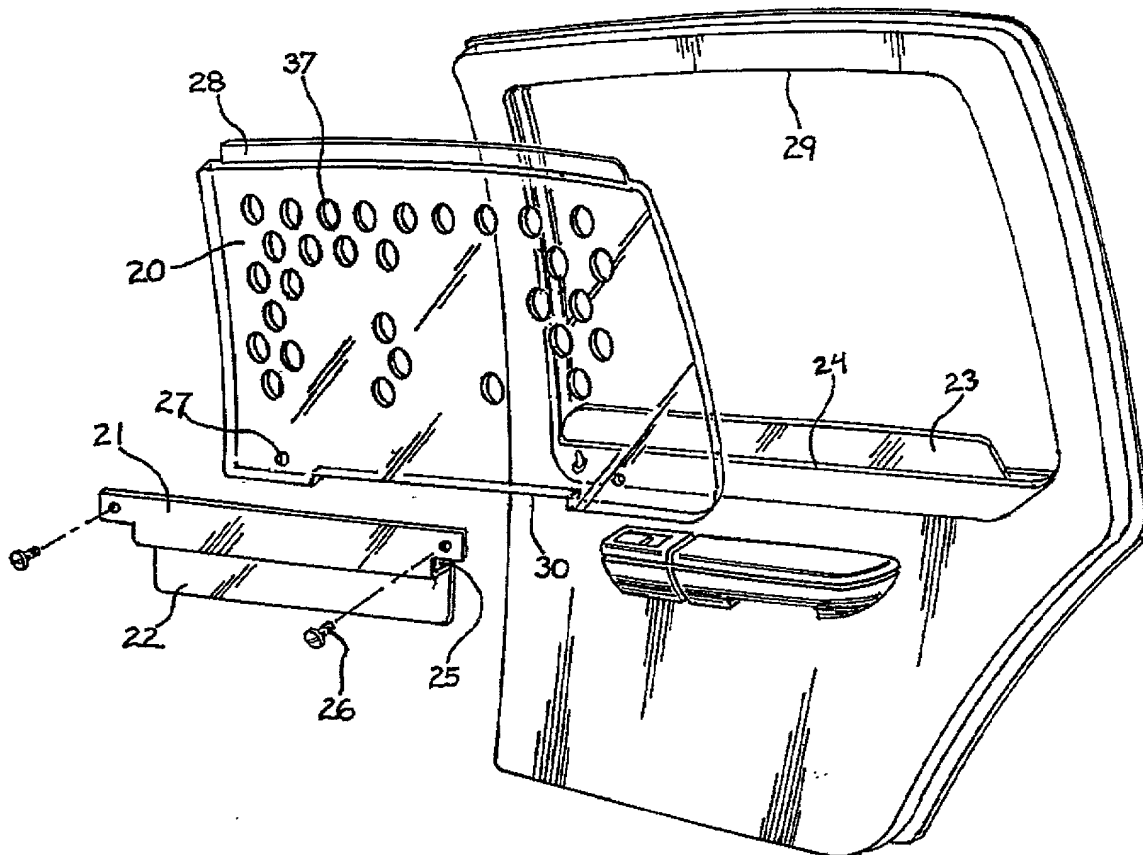


FIG. 1

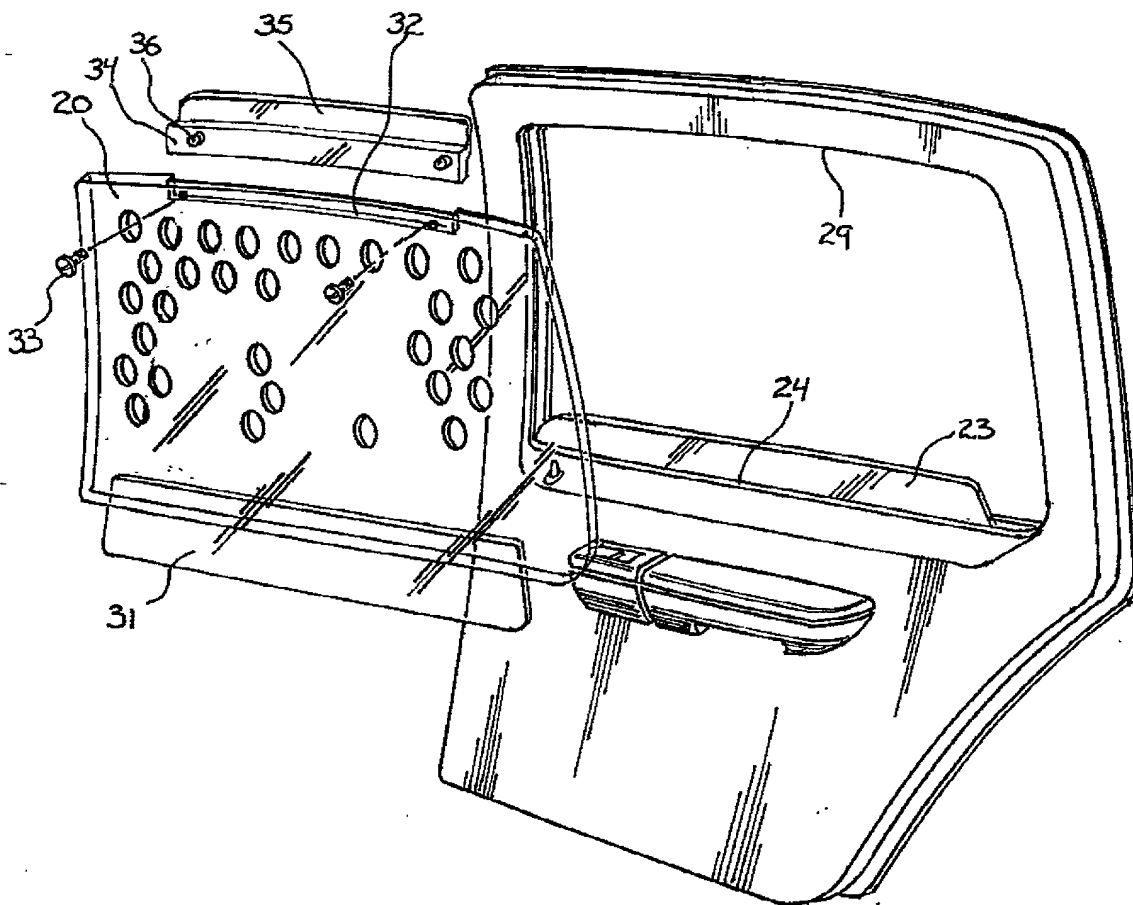
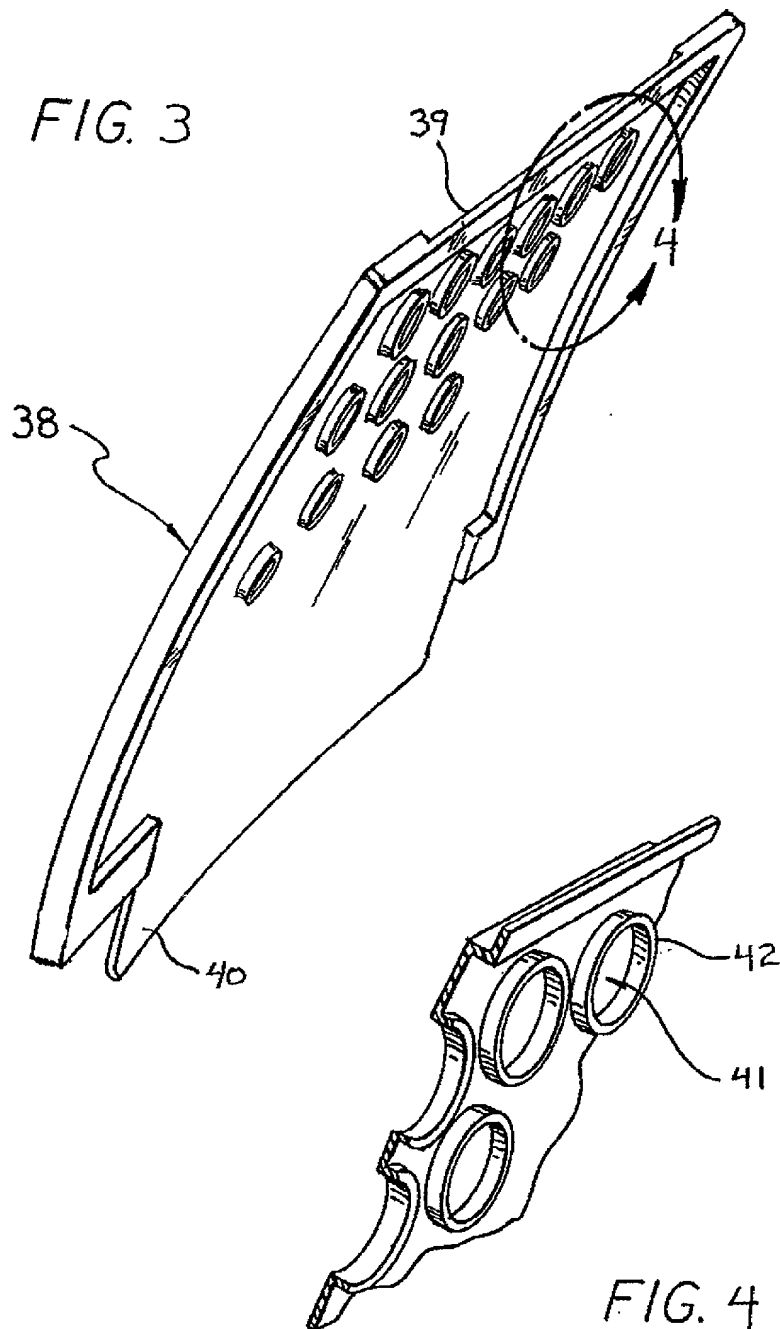
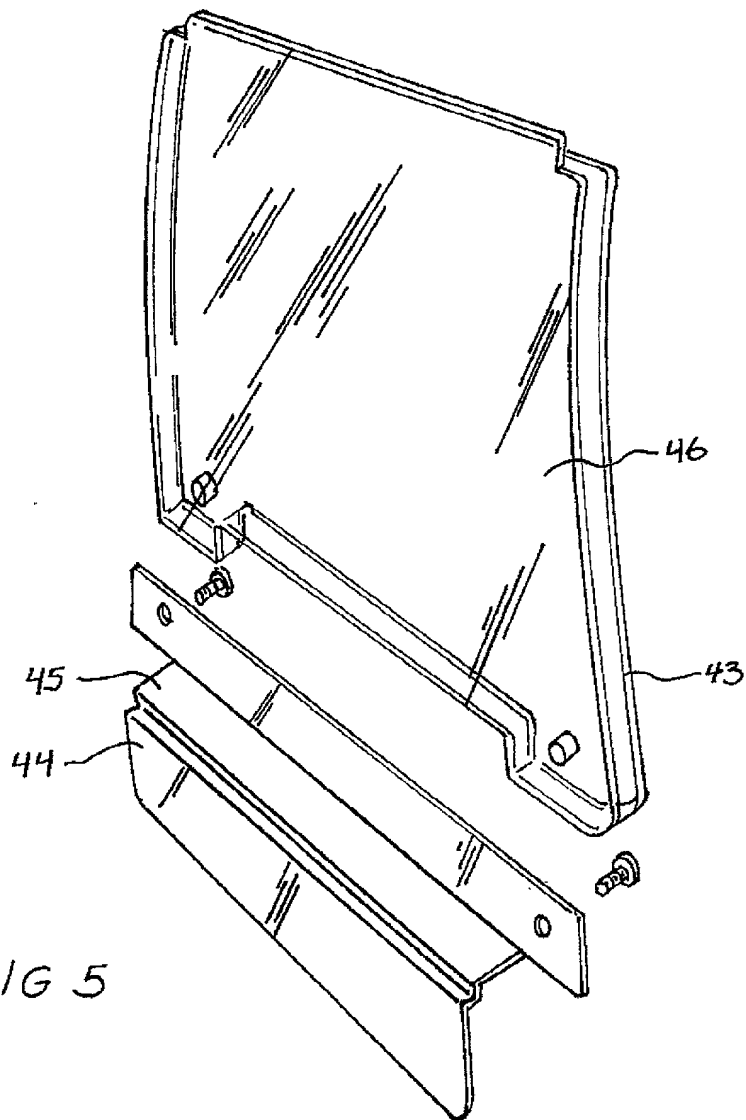


FIG. 2





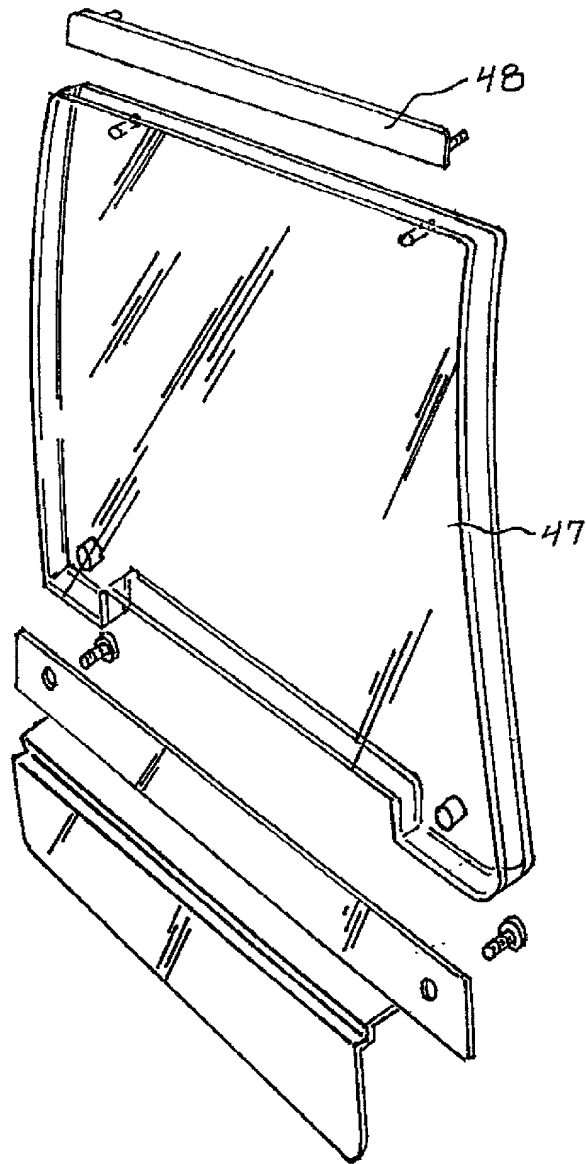


FIG 6

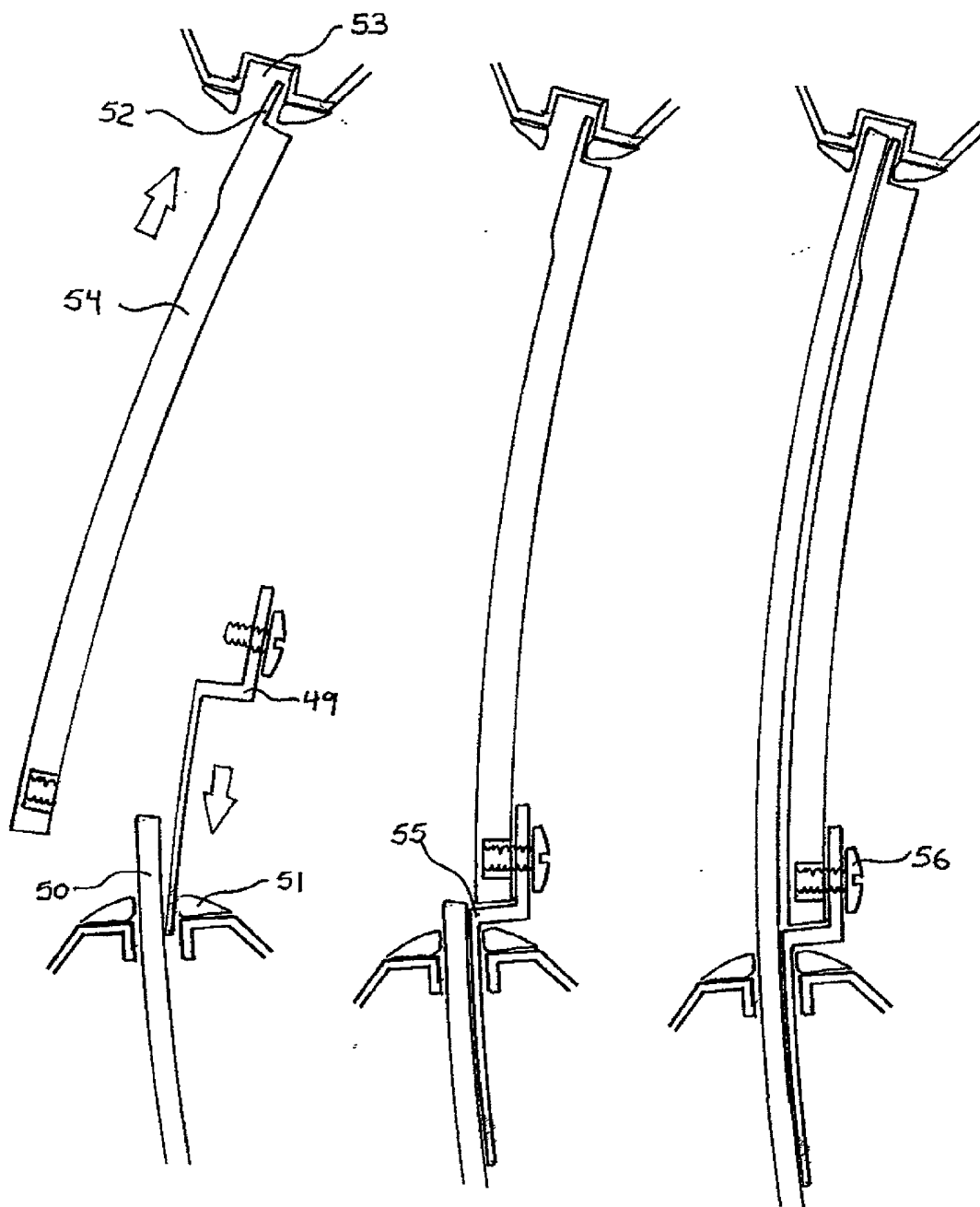


FIG 7

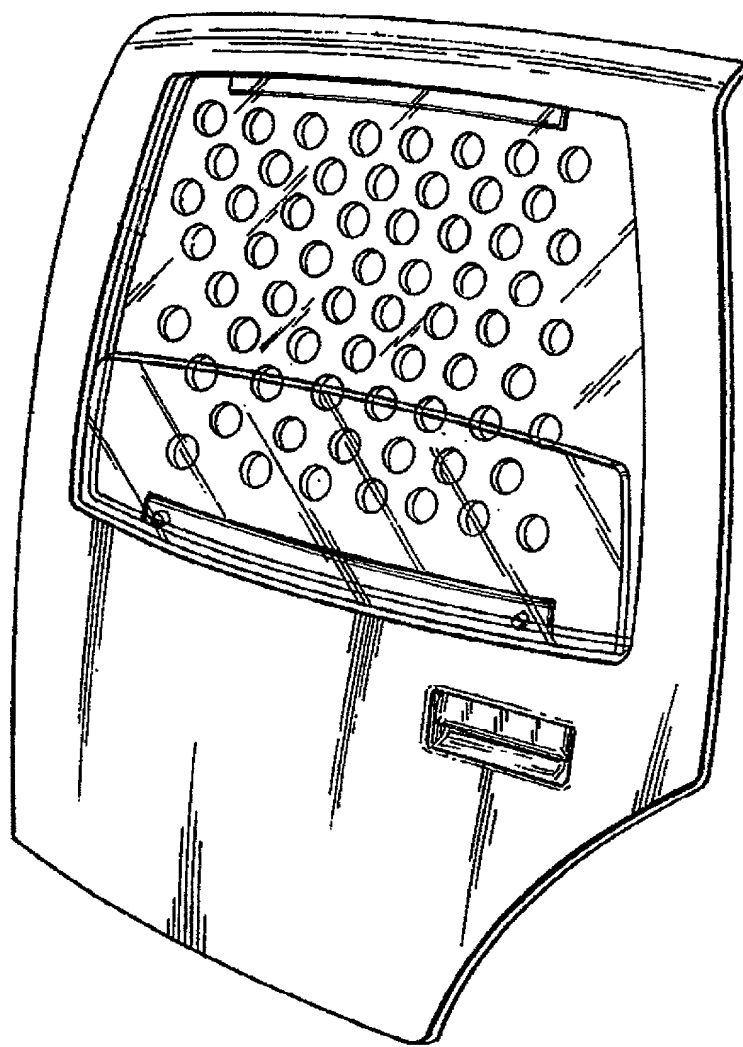


FIG 8

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	First Named Inventor	ALLAN CAMERON
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As a below named inventor, I hereby declare that:

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I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

**SELF-MOUNTING SAFETY WINDOW INSERT**

the specification of which

(Title of the invention)

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OR

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I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment specifically referred to above.

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I hereby claim foreign priority benefits under 35 U.S.C. 119(a)-(d) or 365(b) of any foreign application(s) for patent or inventor's certificate, or 365(a) of any PCT international application which designated at least one country other than the United States of America, listed below and have also identified below, by checking the box, any foreign application for patent or inventor's certificate, or of any PCT international application having a filing date before that of the application on which priority is claimed.

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(Page 1 of 2)

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Declaration for Utility or Design Patent Application (PTO/SB/01)[1-1.1]—page 1 of 2

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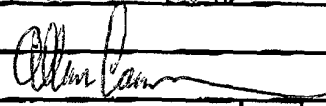
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Direct all correspondence to: ☒ Customer Number or Bar Code Label ☐ Correspondence address below

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Inventor's Signature				Date	2/7/00
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